

General Assembly

Raised Bill No. 1198

January Session, 2023

LCO No. 5376



Referred to Committee on EDUCATION

Introduced by: (ED)

AN ACT IMPLEMENTING THE RECOMMENDATIONS OF THE SCHOOL INDOOR AIR QUALITY WORKING GROUP.

Be it enacted by the Senate and House of Representatives in General Assembly convened:

- 1 Section 1. Section 370 of public act 22-118 is repealed and the
- 2 following is substituted in lieu thereof (*Effective from passage*):
- 3 (a) There is established a working group to study and make
- 4 recommendations related to indoor air quality within school buildings.
- 5 Such recommendations shall include, but need not be limited to:
- 6 (1) The optimal humidity and temperature ranges to ensure healthy
- 7 air and promote student learning;
- 8 (2) Threshold school air quality emergency conditions warranting
- 9 temporary school closures based on the presence of insufficient heat, an
- 10 excessive combination of indoor temperature and humidity levels, or
- 11 some other thresholds;
- 12 (3) Criteria for rating the priority of heating, ventilation and air
- 13 conditioning repair and remediation needs, including the public health

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- 14 condition and needs of the students attending a school;
- 15 (4) Optimal heating, ventilation and air conditioning system 16 performance benchmarks for minimizing the spread of infectious
- 17 disease;
- 18 (5) Protocols to be used by school districts to receive, investigate and
- 19 address complaints or evidence of mold, pest infestation, hazardous
- 20 odors or chemicals and poor indoor air-quality;
- 21 (6) The frequency with which local and regional boards of education
- 22 should be providing for a uniform inspection and evaluation program
- 23 of the indoor air quality within school buildings, such as the
- 24 Environmental Protection Agency's Indoor Air Quality Tools for
- 25 Schools Program, and whether such program should be provided for at
- all schools or only at those constructed before or after a certain date;
- 27 (7) Best practices for the proper maintenance of heating, ventilation
- 28 and air conditions systems in school buildings, including the frequency
- 29 and scope of such maintenance;
- 30 (8) A system of equitable distribution of funds, based on need, under
- 31 the heating, ventilation and air conditioning system grant program
- 32 pursuant to section 10-265r of the general statutes;
- [(8)] (9) Any other criteria affecting school indoor air quality; and
- 34 [(9)] (10) Proposals for legislation to carry out any of the
- 35 recommendations of the working group.
- 36 (b) The working group shall consist of the following members:
- 37 (1) Three appointed by the president pro tempore of the Senate, one
- 38 of whom is a representative of ConnectiCOSH, one of whom is a
- 39 representative of the Associated Sheet Metal and Roofing Contractors of
- 40 Connecticut, and one of whom is a member of the Senate;
- 41 (2) Three appointed by the speaker of the House of Representatives,

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- one of whom is a specialist in the field of children's health, one of whom
- 43 [shall] is a representative of the Connecticut State Building Trades
- 44 Council, and one of whom is a member of the House of Representatives;
- 45 (3) Two appointed by the majority leader of the Senate, one of whom
- 46 is a representative of the American Federation of Teachers-Connecticut
- 47 and one of whom is a representative of the Connecticut Association of
- 48 Public School Superintendents;
- 49 (4) Two appointed by the majority leader of the House of
- 50 Representatives, one of whom is a representative of the Connecticut
- 51 Education Association and one of whom is a representative of the
- 52 Connecticut Association of Boards of Education;
- 53 (5) Two appointed by the minority leader of the Senate, one of whom
- is a specialist in the field of medicine on respiratory health and one of
- 55 whom is a representative of the Council of Small Towns;
- 56 (6) Two appointed by the minority leader of the House, one of whom
- 57 is an industrial hygienist and one of whom is a representative of the
- 58 Mechanical Contractors of Connecticut;
- 59 (7) Two appointed by the Governor, one of whom is a school nurse
- and one of whom is a representative of the Connecticut Conference of
- 61 Municipalities;
- 62 (8) The Secretary of the Office of Policy and Management, or the
- 63 Secretary's designee;
- 64 (9) The Commissioner of Education, or the commissioner's designee;
- 65 (10) The Commissioner of Administrative Services, or the
- 66 commissioner's designee;
- 67 (11) The Labor Commissioner, or the commissioner's designee;
- 68 (12) The Commissioner of Public Health, or the commissioner's
- 69 designee;

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- 70 (13) The Commissioner of Consumer Protection, or the 71 commissioner's designee; and
- 72 (14) The Commissioner of Energy and Environmental Protection, or 73 the commissioner's designee.

- (c) All appointments to the working group shall be made not later than sixty days after the effective date of this section. Any vacancy shall be filled by the appointing authority.
- (d) The member of the Senate appointed by the president pro tempore of the Senate pursuant to subdivision (1) of subsection (b) of this section and the member of the House of Representative appointed by the speaker of the House of Representatives pursuant to subdivision (2) of subsection (b) of this section shall serve as the chairpersons of the working group. Such chairpersons shall schedule the first meeting of the working group, which shall be held not later than sixty days after the effective date of this section.
- (e) Not later than [January 4, 2023] <u>July 1, 2024</u>, the working group shall submit a report on its findings and recommendations to the Governor and the joint standing committees of the General Assembly having cognizance of matters relating to education, labor and public health, in accordance with the provisions of section 11-4a of the general statutes. The working group shall terminate on [January 4, 2023] <u>July 1, 2024</u>, or on the submission of the report, whichever is later.
- Sec. 2. (NEW) (Effective July 1, 2023) (a) The Department of Administrative Services shall establish and maintain a single electronic portal available on the Internet and located on the department's Internet web site for the purpose of receiving and posting the report and results of an inspection and evaluation of the indoor air quality and the heating, ventilation and air conditioning system of a school building conducted pursuant to subsection (d) of section 10-220 of the general statutes, as amended by this act. Such electronic portal shall be known as the School Indoor Air Quality and HVAC Portal.

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- (b) The department shall prescribe the form and manner in which a local or regional board of education shall submit the report and results of an inspection and evaluation of the indoor air quality and the heating, ventilation and air conditioning system of a school building. The department may consult with representatives from the indoor air quality and heating, ventilation and air conditioning industry to develop a standard reporting form for the electronic portal.
- (c) The School Indoor Air Quality and HVAC Portal shall include, but need not be limited to: (1) The standard reporting form developed pursuant to subsection (b) of this section and instructions for the submission of such form and the report and results of an inspection and evaluation of the indoor air quality and the heating, ventilation and air conditioning system of a school building, (2) a searchable database of the reports and results of such inspections and evaluations, and (3) aggregated data of such results.
- Sec. 3. Subsection (d) of section 10-220 of the general statutes is repealed and the following is substituted in lieu thereof (*Effective July 1*, 2023):
 - (d) (1) As used in this subsection:

- (A) "Certified testing, adjusting and balancing technician" means a technician certified to perform testing, adjusting and balancing of heating, ventilation and air conditioning systems by the Associated Air Balance Council, the National Environmental Balancing Bureau or the Testing, Adjusting and Balancing Bureau, or an individual training under the supervision of a Testing, Adjusting and Balancing Bureau certified technician or a person certified to perform ventilation assessments of heating, ventilation and air conditioning systems through a certification body accredited by the American National Standards Institute;
 - (B) "Heating, ventilation and air conditioning system" means the equipment, distribution network, controls and terminals that provide, either collectively or individually, heating, ventilation or air

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133 conditioning to a building; and

- (C) "Indoor air quality" has the same meaning as used by the United States Department of Labor Occupational Safety and Health Administration Standard Number 1910.1000 "OSHA Policy on Indoor Air Quality".
- 138 (2) Prior to January 1, 2008, and every three years thereafter, for every 139 school building that is or has been constructed, extended, renovated or 140 replaced on or after January 1, 2003, a local or regional board of 141 education shall provide for a uniform inspection and evaluation 142 program of the indoor air quality within such buildings [, such as] using 143 the Environmental Protection Agency's Indoor Air Quality Tools for 144 Schools Program. The inspection and evaluation program shall include, 145 but not be limited to, a review, inspection or evaluation of the following: 146 (A) The heating, ventilation and air conditioning systems; (B) radon 147 levels in the air; (C) potential for exposure to microbiological airborne 148 particles, including, but not limited to, fungi, mold and bacteria; (D) 149 chemical compounds of concern to indoor air quality including, but not 150 limited to, volatile organic compounds; (E) the degree of pest 151 infestation, including, but not limited to, insects and rodents; (F) the 152 degree of pesticide usage; (G) the presence of and the plans for removal 153 of any hazardous substances that are contained on the list prepared 154 pursuant to Section 302 of the federal Emergency Planning and 155 Community Right-to-Know Act, 42 USC 9601 et seq.; (H) ventilation 156 systems; (I) plumbing, including water distribution systems, drainage 157 systems and fixtures; (J) moisture incursion; (K) the overall cleanliness 158 of the facilities; (L) building structural elements, including, but not 159 limited to, roofing, basements or slabs; (M) the use of space, particularly 160 areas that were designed to be unoccupied; and (N) the provision of 161 indoor air quality maintenance training for building staff. Local and 162 regional boards of education conducting evaluations pursuant to this 163 subsection shall (i) make available for public inspection the results of the 164 inspection and evaluation at a regularly scheduled board of education 165 meeting and on the board's or each individual school's web site, and (ii) 166 submit the report and results of such inspection and evaluation to the

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Department of Administrative Services in accordance with the provisions of section 2 of this act.

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(3) Prior to January 1, [2024] 2025, and every five years thereafter, a local or regional board of education shall provide for a uniform inspection and evaluation of the heating, ventilation and air conditioning system within each school building under its jurisdiction. Such inspection and evaluation shall be performed by a certified testing, adjusting and balancing technician, an industrial hygienist certified by the American Board of Industrial Hygiene or the Board for Global EHS Credentialing, or a mechanical engineer. Such heating, ventilation and air conditioning systems inspection and evaluation shall include, but need not be limited to: (A) Testing for maximum filter efficiency, (B) physical measurements of outside air delivery rate, (C) verification of the appropriate condition and operation of ventilation components, (D) measurement of air distribution through all system inlets and outlets, (E) verification of unit operation and that required maintenance has been performed in accordance with the most recent indoor ventilation standards promulgated by the American Society of Heating, Refrigerating and Air-Conditioning Engineers, (F) verification of control sequences, (G) verification of carbon dioxide sensors and acceptable carbon dioxide concentrations indoors, and (H) collection of field data for the installation of mechanical ventilation if none exist. The ventilation systems inspection and evaluation shall identify to what extent each school's current ventilation system components, including any existing central or noncentral mechanical ventilation system, are operating in such a manner as to provide appropriate ventilation to the school building in accordance with most recent indoor ventilation standards promulgated by the American Society of Heating, Refrigerating and Air-Conditioning Engineers. The inspection and evaluation shall result in a written report, and such report shall include any corrective actions necessary to be performed to the mechanical ventilation system or the heating, ventilation and air conditioning infrastructure, including installation of filters meeting the most optimal level of filtration available for a given heating, ventilation and air

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201 conditioning system, installation of carbon dioxide sensors and 202 additional maintenance, repairs, upgrades or replacement. Any such 203 corrective actions shall be performed, where appropriate, by a 204 contractor, who is licensed in accordance with chapter 393. Any local or 205 regional board of education conducting an inspection and evaluations 206 pursuant to this subsection shall (i) make available for public inspection 207 the results of such inspection and evaluation at a regularly scheduled 208 meeting of such board and on the Internet web site of such board and 209 on the Internet web site, if any, of each individual school, and (ii) submit 210 the report and results of such inspection and evaluation to the Department of Administrative Services in accordance with the 211 212 provisions of section 2 of this act. A local or regional board of education 213 shall not be required to provide for a uniform inspection and evaluation 214 under this subdivision for any school building that will cease to be used 215 as a school building within the three years from when such inspection 216 and evaluation is to be performed. The Department of Administrative 217 Services may, upon request of a local or regional board of education, 218 grant a waiver of the January 1, 2025, deadline for the provision of a uniform inspection and evaluation under this subdivision if the 219 220 department finds that (I) there is an insufficient number of certified 221 testing, adjusting and balancing technicians, industrial hygienists 222 certified by the American Board of Industrial Hygiene or the Board for 223 Global EHS Credentialing, or mechanical engineers to perform such 224 inspection and evaluation, (II) such board has provided for an 225 inspection that was performed in a different format, but is deemed equivalent by the department, or (III) such board has scheduled such 226 227 inspection and evaluation for a date after January 1, 2025.

Sec. 4. Section 10-265t of the general statutes is repealed and the following is substituted in lieu thereof (*Effective July 1, 2023*):

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(a) For the purposes described in subsection (b) of this section, the State Bond Commission shall have the power from time to time to authorize the issuance of bonds of the state in one or more series and in principal amounts not exceeding in the aggregate [seventy-five million dollars] three hundred seventy-five million dollars, provided one

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235 <u>hundred fifty million dollars of said authorization shall be effective July</u>
236 1, 2024.

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- (b) The proceeds of the sale of said bonds, to the extent of the amount stated in subsection (a) of this section, shall be used by the Department of Administrative Services for the purpose of providing grants-in-aid for school air quality improvements [including, but not limited to, upgrades to, replacement of or installation of heating, ventilation and air conditioning equipment] under the heating, ventilation and air conditioning system grant program pursuant to section 10-265r, provided not more than fifty million dollars of such proceeds may be used to provide reimbursements for such improvements that were completed not earlier than March 1, 2020, and not later than July 1, 2022.
- (c) All provisions of section 3-20, or the exercise of any right or power granted thereby, which are not inconsistent with the provisions of this section are hereby adopted and shall apply to all bonds authorized by the State Bond Commission pursuant to this section, and temporary notes in anticipation of the money to be derived from the sale of any such bonds so authorized may be issued in accordance with said section 3-20 and from time to time renewed. Such bonds shall mature at such time or times not exceeding twenty years from their respective dates as may be provided in or pursuant to the resolution or resolutions of the State Bond Commission authorizing such bonds. None of said bonds shall be authorized except upon a finding by the State Bond Commission that there has been filed with it a request for such authorization which is signed by or on behalf of the Secretary of the Office of Policy and Management and states such terms and conditions as said commission, in its discretion, may require. Said bonds issued pursuant to this section shall be general obligations of the state and the full faith and credit of the state of Connecticut are pledged for the payment of the principal of and interest on said bonds as the same become due, and accordingly and as part of the contract of the state with the holders of said bonds, appropriation of all amounts necessary for punctual payment of such principal and interest is hereby made, and the State Treasurer shall pay such principal and interest as the same

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Sec. 5. (NEW) (*Effective July 1, 2023*) On or before July 1, 2024, the Commissioner of Public Health shall adopt regulations, in accordance with the provisions of chapter 54 of the general statutes, to establish an optimal thermal comfort range of sixty-five to eighty degrees Fahrenheit for school buildings and facilities, except that gymnasiums and natatoriums may have a larger optimal thermal comfort range.

This act shall take effect as follows and shall amend the following		
sections:		
Section 1	from passage	PA 22-118, Sec. 370
Sec. 2	July 1, 2023	New section
Sec. 3	July 1, 2023	10-220(d)
Sec. 4	July 1, 2023	10-265t
Sec. 5	July 1, 2023	New section

Statement of Purpose:

To (1) implement the recommendations of the school indoor air quality working group by extending and expanding the charge of the school indoor air quality working group, (2) establish the School Indoor Air Quality and HVAC Portal for the purpose of collecting and making available reports of inspections and evaluations of school indoor air quality and heating, ventilation and air conditioning systems, (3) increase the amount of funding under the heating, ventilation and air conditioning system grant program, and (4) require the Commissioner of Public Health to establish an optimal thermal comfort range in school buildings and facilities.

[Proposed deletions are enclosed in brackets. Proposed additions are indicated by underline, except that when the entire text of a bill or resolution or a section of a bill or resolution is new, it is not underlined.]

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